



80/296/RVC

RESULT OF VOTING ON CDV

Project number: IEC 61162-410 Ed.1	Reference number of the CDV 80/262/CDV
IEC/TC or SC TC 80	Date of circulation 2001-03-23
Title of the TC or SC concerned Maritime navigation and radiocommunication equipment and systems	

Title of the committee draft:
Maritime navigation and radiocommunication equipment and systems - Digital interfaces -
Part 410: Multiple talkers and multiple listeners - Ship systems interconnection - Transport profile
requirements and basic transport profile

The above-mentioned document was circulated to National Committees with a request that voting take place for approval for circulation as an FDIS (or publication as a Technical Specification or Report)

Voting results

see printout attached

Comments received – see annex¹

In the case that the approval criteria for acceptance have been met,

a ☒ The committee draft for vote (CDV) will be registered as an FDIS by (date) **2001-04**

DECISION OF THE CHAIRMAN (in cooperation with the secretariat), in the case that the approval criteria for acceptance have not been met or in the case of a draft Technical Specification or Report

b ☐ The committee draft for vote (CDV) will be published as a Technical Specification or Report by (date)

c ☐ A revised committee draft will be circulated as a committee draft for vote (CDV) by (date)

d ☐ A revised committee draft will be circulated for comment by (date)

e ☐ The committee draft and comments will be discussed at the next meeting (date)

NOTE — In the case of a proposal *b*, *c* or *d* made by the chairman, P-members objecting to such a proposal shall inform the Central Office with copy to the secretary in writing within 2 months of the circulation of this compilation (see ISO/IEC Directives, Part 1, 2.6.5).

Name or signature of the Secretary M A Rambaut	Name or signature of the Chairman Dr A Norris
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ANNEX A

Result of Voting on CDV - Document 80/262/CDV

Project: IEC 61162-410 Ed.1

Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 410: Multiple talker and multiple listeners - Ship systems interconnection - Transport profile requirements and basic transport profile

Circulation Date: 2000-04-07

Closing Date: 2000-09-15

Country	Status	Sent	Received	Vote	Comments
Belgium	P	2000-09-13	2000-09-13	Y	-
Canada	P	2000-09-15	2000-09-15	A	-
China	P	2000-09-15	2000-09-15	Y	-
Denmark	P	2000-09-11	2000-09-11	N	Y
Finland	P	2000-09-12	2000-09-12	A	-
France	P	2000-09-07	2000-09-07	Y	-
Germany	P	2000-09-13	2000-09-13	Y	Y
Greece	O	2000-09-13	2000-09-13	A	-
Ireland	O	2000-09-14	2000-09-14	Y	-
Italy	P	2000-09-15	2000-09-15	Y	-
Japan	P	2000-09-08	2000-09-08	Y	-
Netherlands	P	2000-09-14	2000-09-14	Y	-
Norway	P	2000-09-08	2000-09-08	Y	Y
Portugal	-	2000-09-12	2000-09-12	A	-
Russian Fed.	P	2000-07-10	2000-07-10	Y	-
Spain	O	2000-07-06	2000-07-06	Y	-
Sweden	P	2000-09-04	2000-09-04	Y	-
U.S.A.	P	2000-09-06	2000-09-06	Y	-
United Kingdom	P	2000-08-16	2000-08-16	Y	-

		Approval Criteria	Result
P-members voting: 13			
P-members in favour: 12 = 92 %		>= 67%	APPROVED
Total votes cast: 15	Total against: 1 = 7 %	<= 25%	APPROVED
Final Decision:			APPROVED

NOTES

1 Vote: Does the National Committee agree to the circulation of the draft as a FDIS:

Y = In favour; N = Against; A = Abstention.

2 Only votes received before the closing date are counted in determining the decision.

Late Votes: (0).

3 Abstentions are not taken into account when totalizing the votes.

4 P-members not voting: Egypt; Romania; (2).

Annex

Date 2001-02-14	Document 80/262/CDV
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National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
DK				<p>IEC 61162-410 “ T-profile requirements and basic transport profile”</p> <p>The T-profile document is written in same manner as the A-profile document and therefore it also cannot be classified as a profile document. A major point is on page 38. It is clear that the T-profile in most cases is tightly connected to a TCP/IP environment. In section 6.2.2 on page 38+ a typical Ethernet based implementation is shown. A trade-off for the Ethernet based implementation is real-time and priority levels. As stated in section 6.4.2.5 Ethernet do only support two priority levels. Another major negative effect in 6.4.2.5 is that it seems that different implementations of priority systems do exist, even on Ethernet. The conclusion here is that instead of setting up a profile document including demands for profiles, the document tries to adapt to whatever profile it is given, which effectively removes any strict profile definition.</p> <p>In the appendices some “informative” examples on different issues as software structure, channel synchronisation and network management are given. But as stated this is only on a suggested informative level and is NOT part of the standard.</p> <p>To summarise, the document does not give any profile documentation for the T-profile, and no useful interface description up against the A-profile exists.</p>		<p>The 410 document is indeed fairly focused on the Ethernet implementation, but should also be able to serve as a guideline for writing new T-profiles and also for making new implementations. We believe that it is better written as it is as that gives some more emphasis on implementation as is normal in IEC 61162 standards. Lacking any more concrete suggestions for improvements we will also not incorporate any at this stage.</p>

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
DK			General	<p>This evaluation will use selected examples of the documents to clarify the overall impression of the standards, which is as follows:</p> <p>The document stated that IEC 61162 is not for certified, safety critical use, but is only for data collection and ship wide integration. This gives no meaning when analysing the four sub standards IEC 61162-1,2,3 and 4. Low speed and CAN bus-based fieldbusses are to be used at plant level, otherwise it has no meaning.</p> <p>1. The use of a communication protocol at plant level demands proper predictable behaviour and that the equipment is to be certified with this standard as communication interface. This is in contradiction with IEC 61162 which states it is intended to be used at plant level where regulations for behaviour exist (LR, DNV,...).....(cont)</p>	<p>The scope must be consistent. It seems that a change in scope has taken place during the editing process (some of the detailed chapters have the scope of safety critical functions)</p>	<p>Only editorial issues and minor technical details have been changed in the document between last distribution in the WG and distribution as CDV.</p> <p>The scope section says that the protocol is to be used for integration at system level, and hence in safety related functions. However, it further states that the actual safety of a given implementation is dependent on a large number of factors of which the protocol is only one. It is ultimately up to class and other authorities to approve a specific ship or class of ships.</p>

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
DK			General (cont)	<p>2. The IEC 61162 standard documents do not give a proper strict definition of the standard. It is not a profile document (as it should be) but a description of a proposed implementation.</p> <p>3. It is not possible to use the documents to design and implement the protocol because the lack of proper strict and consistent description.</p> <p>4. It is impossible to verify whether a given implementation conforms to the standard or not, based on the IEC 61162 documents.</p> <p>5. Authorities like Lloyds and Veritas normally validate integrated ship control systems. This implies very formal definitions for response times, redundant considerations and other safety related topics. In short a communication standard for use in integrated ship control systems must take this in serious consideration and offer the necessary information for legislation.</p>		

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
DK		General		<p>The document is NOT a profile document. It is in some way a loose description of an intended implementation of the 61162 protocol. It is nearly impossible to use the document to design an implementation of the standard, and later on analyse and verify the behaviour of an implementation/design. A standard description must be very strict and shall follow a definition paradigm (like the old JTC 1 TR 10000).</p> <p>Instead the document gives a rough overview of an internal design overview for a proposed implementation of IEC 61162. This way of describing IEC 61162 will cause a lot of problems because no profile documentation exists and therefore it is impossible to verify whether a given implementation conforms to the standard or not.</p>		See above comment. Also notice that a prototype implementation has been made and that comments from this work has been incorporated in the new edition. Lacking more concrete comments, no changes will be made.
DE 1	1	Scope	Editorial	„Internet V4 protocol ...“ Is there a reference to this protocol?		
NO	3.1.33	8	Editorial	Better explanation of UDP double port numbers would be good	Change if appropriate.	Changed clause to specify that any sending port number can be used, but that the even number is recommended (it has no effect on the implementation what port i used).
NO	4.3.3.1	Table 2	Editorial	Make sure that table is consistent with Table 4 in 5.2.2. It looks a bit confusing.	Change if appropriate.	Removed /or from priority in table 2 and explained the or in the priority section (4.3.3.5). Table 4 is rearranged to have the same ordering and cell data as table 2 and two additional notes have been added to give a better explanation to the implementor. Changed 5.3.3.1 to include additional parameters (port and priority).

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
NO	5	TPN vs. CP	Technical	It may be better to change the system so that one class service only can be derived from one TP network class. Otherwise it looks as if more information must be provided when CPs are connected, e.g., IP port numbers.	Change if appropriate (see also previous).	Added a stronger emphasis on the benefits of dividing TPNs into several in the note in clause 5.2.1. The standard will not require only one TP network in itself. A note has also been added to 6.2.3.1 and 7.1. Clause 6.4.2.2 and 6.4.2.3 has been updated with an extra figure and some modified text and figures to better show how CPs work, in particular when looked at from the server side.
NO	5.2.3.3	Heading	Editorial	Misprint none-red ..	Non-redundant	Done.
NO	5.3.4.4	Heading	Editorial	Uppercase on first word	Get	Done.
NO	5.3.4.5	Fig. 7	Editorial	OK state has two events with same label. Should be an extra test directing outcome (queue full).	Add test	Done.
NO	6.2.3.1	Tab. 8/Para 2	Editorial/Technical	Ref. in notes column is wrong Para 2 discusses extra address parameters that are not included in address format discussion in table.	Ref. should be 3.1.33 Fix table.	Text modified somewhat to discuss extra CP parameters and table references corrected.
NO	6.3.1	Tab 9	Editorial	Misprint in octet count, last line and further must be increased with one	Fix.	Done. Also applies to table 10.
NO	6.3.3	Tab 11	Technical	Must determine if header "total length" shall include extra BC header – probably not	Make text clear.	6 additional bytes not included in the total count. Total count is part 401 message length.
NO	6.6.5	Note 1	Editorial	Misprint: scan instead of can	Correct	Done.
NO	7.1	Tab 13	Technical	Codes in first column do not match Table 6	Correct either	Corrected.
NO	Annex B	Last para	Editorial	Previous clause should be 6.4.2.4	Correct	Corrected.
NO	Annexes	Fig.s	Editorial	Should annex figures be numbered?	check	No numbering.